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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/535,156

04/05/2006

Alain Nepveu

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EXAMINER

HARRIS, ALANA M

ART UNIT

PAPER NUMBER

1643

NOTIFICATION DATE

DELIVERY MODE

03/19/2010

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No. 10/535,156	Applicant(s) NEPVEU ET AL.	
	Examiner Alana M. Harris, Ph.D.	Art Unit 1643	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12/23/2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11, 16-19 and 26-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11, 16-19 and 26-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>12/23/2009</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment and Arguments

1. Claims 11, 16-19 and 26-28 are pending.

Claims 11 and 26 have been amended.

Claims 11, 16-19 and 26-28, to the extent protein is detected is examined on the merits.

Maintained Grounds of Rejections

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. The rejection of claim 11 under 35 U.S.C. 102(b) as being anticipated by Moon et al. (Molecular and Cellular Biology 21(18): 6332-6345, September 2001/ IDS reference C43 submitted April 5, 2006) as evidenced by Goulet (Biol. Chem. 387: 1285-1293, September 2006) is maintained.

Applicants' arguments suggest with the amendment submitted December 23, 2009 to claim 11, as well as claim 26 the prior art does not read on the claimed invention, see page 5 and Figure A. Applicants note the p75 polypeptide produced by translation initiation in exon 21 is shown in yellow in Figure A, see page 4. Applicants further note Moon 2001 did not disclose p75, hence cannot anticipate claim 11, see page 5 of the Remarks, last paragraph. These arguments, the Figure and points of view have been carefully considered, but found unpersuasive.

Applicants are reminded the Examiner has black and white copies of the Remarks and corresponding Figures, hence colors can not be discerned. The new amendment does not impart novelty upon the claimed invention, nor preclude the instant rejection. Applicants' claim 11 reads on three active steps: obtaining a sample; contacting said sample with an antibody that binds p75; and detecting bound antibody. Moon 2001 reads on all three steps and discloses the 110-kDa protein was recognized by the 861 and 1300 antibodies, see Figure 2. It is well known in the art that the 200-kDa species, 110-kDa species, 90-kDa species, all contain the two DNA binding domains that p75 contains, Cut repeat 3 (CR3) and the Cut homeodomain (HD). Hence, the antibodies of Moon will bind these domains that are shared amongst the 200-kDa species, 110-kDa species, 90-kDa species, as well as the 75-kDa species. The structural identity shared amongst all the proteins will at the least yield cross reactivity.

The antibodies of Moon recognized the full length 200-kDa CDP/Cut protein, a 110-kDa protein, as well as 90 kDa protein, see page 6336, An amino-truncated...section. Consequently, the rejection is maintained for the reasons of record and reiterated herein.

4. The rejection of claim 11 under 35 U.S.C. 102(a) as being anticipated by Moon et al. (Int. J. Cancer 100: 429-432, August 2002) is maintained.

Applicants' arguments directed toward this rejection are the same as set forth on the preceding page. These arguments, the Figure and points of view have been carefully considered, but found unpersuasive.

The antibodies of Moon 2002, α 861 anti-CDP/Cux antibodies recognized 3 isoforms, p200, p110 and p100, see Figure 1 on page 430; and Figure 2. Figure 2, the diagram shows a schematic representation of the CDP/Cux proteins, specifically domains CR3 and HD that are shared by all three listed isoforms, as well as p75. Hence, these same antibodies that recognize p200, p110 and p100 will recognize these shared domains within p75. The structural identity shared amongst all the proteins will at the least yield cross reactivity. Consequently, the rejection is maintained for the reasons of record and reiterated herein.

Claim Rejections - 35 USC § 103

5. The rejection of claims 11, 16-19 and 26-28 under 35 U.S.C. 103(a) as being unpatentable over Moon et al. (Molecular and Cellular Biology 21(18): 6332-6345, September 2001/ IDS reference C43 submitted April 5, 2006), further in view of Nepveu (Gene 270: 1-5, 2001/IDS reference C44 submitted April 5, 2006) is maintained and made.

Applicants assert the references, either alone or in combination teach or suggest a p75 polypeptide produced by translation initiation in exon 21 of the CDP/Cux gene, See page 6 of the Remarks. Applicants conclude arguments asserting the cited prior obvious does not render the claims obvious. These arguments and points of view have been carefully considered, but found unpersuasive.

The teachings of Moon 2001 have been presented in the 102(b) rejection and maintained. For the reasons of record and set forth in the 102 rejection this 103(a) rejection is maintained.

6. The rejection of claims 11, 16-19 and 26-28 under 35 U.S.C. 103(a) as being unpatentable over Moon et al. (Int. J. Cancer 100: 429-432, August 2002), further in view of Nepveu (Gene 270: 1-5, 2001/IDS reference C44 submitted April 5, 2006) is maintained and made.

Applicants presented arguments directed to the former 103(a) rejections of record. These rejections are the same as that presented in the 102

Art Unit: 1643

rejections. These arguments further assert since p75 is novel and non-obvious, its detection and kits are not obvious, see Remarks, page 6. These points of view have been carefully considered, but found unpersuasive.

The teachings of Moon 2002 have been presented in the 102(a) rejection and maintained. For the reasons of record and set forth in the 102 rejection this 103(a) rejection is maintained.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Alana M. Harris, Ph.D. whose telephone number is (571)272-0831. The Examiner works a flexible schedule, however she can normally be reached on 7:30 am to 6:30 pm, Monday through Saturday with alternate Fridays off.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Larry R. Helms, Ph.D. can be reached on (571) 272-0832. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1643

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Alana M. Harris, Ph.D.
09 March 2010
/Alana M. Harris, Ph.D./
Primary Examiner, Art Unit 1643